

Work Order ID 115419

March-31-14 11:04:36 AM

Mid's
W/LL

Ship April 7

115419

Page 1

Item ID: D3391-023

Accept

N900040100

Setup

Start *NS1*

Revision ID:

Stop

NS2

Item Name: Mid Tube Assembly

Start Date: 3/31/14 Start Qty: 2.00 *2*

Required Date: 4/4/14 Req'd Qty: 2.00 *2*

Reference: 417

Cust Item ID:

Customer:

Approvals: Process Plan: MCL5

Date: 14-03-31 Tooling:

Date: _____

Run

Start *NR1*

QC: _____

Date: _____ SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3391	I								

100

0.00

100

Skidtubes

Memo

0.00

1-Cut tube to finish length as per Dwg D3391

2-Drill pilot holes using DT8796 (Do not drill "B" holes) and drill only 1 fwd saddle hole on one side only as per Dwg D3391

3-Open saddles and GHW holes to Ø0.375" except for fwd saddle hole of detail "J"

4-Remove .030" from Fwd indexing Ridge as per Dwg D3391

5-Remove indexing ridge on Fwd & Aft end of skidtube as per Dwg D3391

6-Deburr

7-Drill #30 pilot holes using wearplate Jig DT8217 Identify Ø0.250" holes with paint marker,

***DO NOT DRILL HOLES #3-19-20 FROM FWD END OF JIG

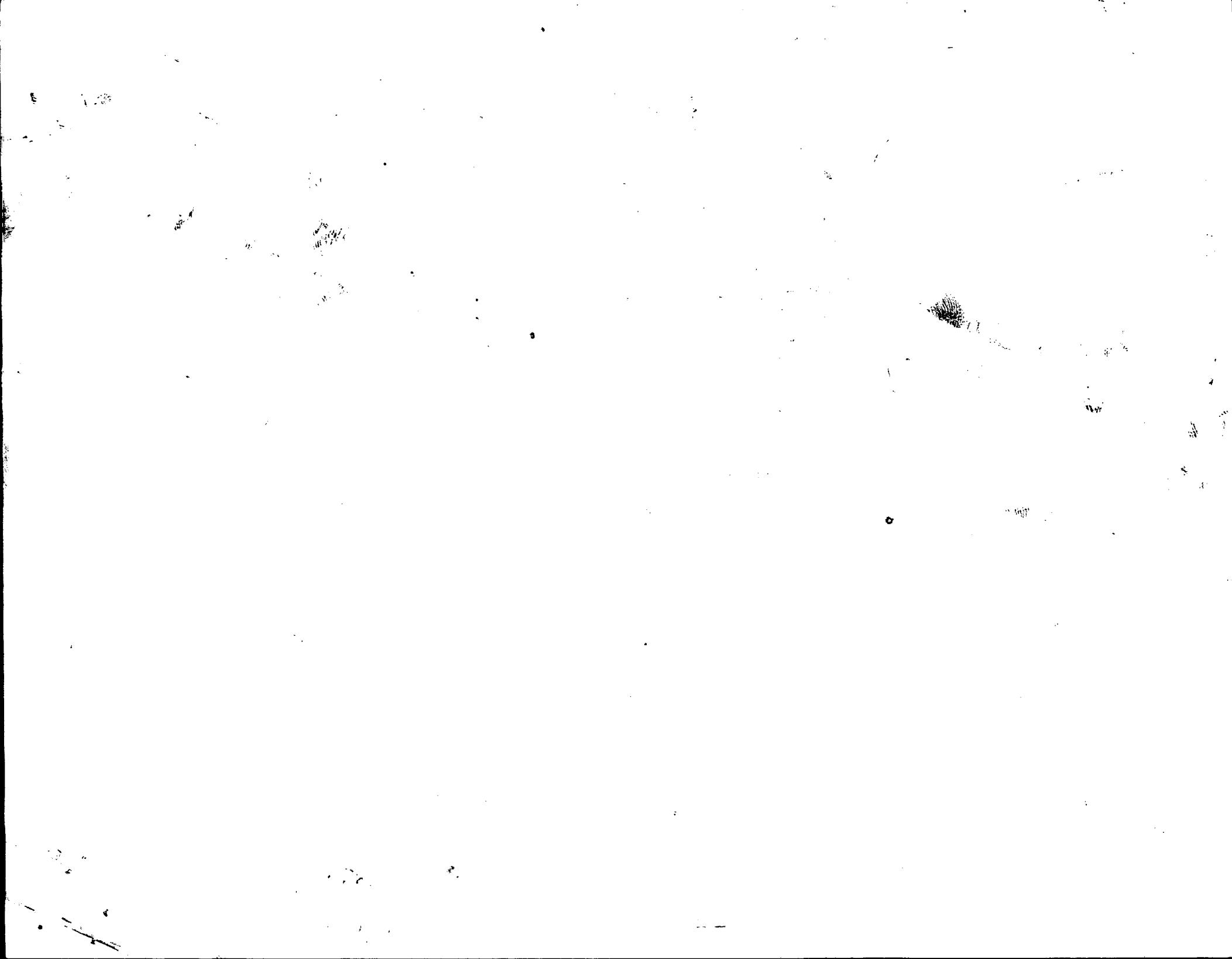
8-Open wearplate holes of D3391-023 assembly detail section G-G to Ø0.250" (10 holes) as per Dwg D3391

9-Open wearplate holes of D3391-023 assembly detail section H-H to Ø0.297" (20 holes) as per Dwg D3391

***DO NOT OPEN 2 MOST FWD WEARPLATE HOLES

- 04/03/31

B115419



Item ID:	D3391-023	Accept	*N900040100*	Setup	Start	*NS1*	
Revision ID:							
Item Name:	Mid Tube Assembly					*NS2*	
Start Date:	3/31/14	Start Qty:	2.00	*2*	Cust Item ID:		
Required Date:	4/14/14	Req'd Qty:	2.00	*2*	Customer:		
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	10-Open .375" holes to .438" ***do not open fwd saddle holes***				DC 14/04/01				
	11-Locate D3391-021 in D3391-023 at 9.00" (see view z-z)								
	12- Transfer drill one fwd saddle hole only to .188" dia, transfer drill all remaining fwd saddle holes using DT 8149 locating from previously drill .188" dia hole, using t-pins and clicos to ensure perfect allignment, open up previously transfer drilled pilot holes in D3391-023/-021 to 0.438" dia. in D3391-021 D3391-021 BATCH:								
	13- Using DT8217, locating from two previously drilled holes, drill remaining wearplate holes into D3391-021.								
	14- Locating from two fwd wearplate holes in D3391-023 drill remaining 6 wearplate holes in D3391-021 using DT8937								
	15- Open 10 wearplate holes in D3391-021 to 0.297" dia.								
	16- insert D3391-021 into D3391-23								
	17- insert T-pins into first and third fwd saddle holes								
	18- ON FIRST SIDE ONLY drill out 2nd and forth fwd saddle holes to 0.500" as per								
	19- ON 2ND SIDE ONLY ream out 2nd and forth saddle hole to 0.499".								
	20-Deburr and blow out all chips from inside tube, scribe batch # in D3391-023 at aft end.								

DC 14/04/01

mid's
alley

DC 14/04/01

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N900040100

Setup Start

NS1

Revision ID:

Item Name: Mid Tube Assembly

Stop

NS2

Start Date: 3/31/14 Start Qty: 2.00

2

Cust Item ID:

Required Date: 4/14/14 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

140

140

Skidtubes

Skidtubes

Memo

0.00

1-Open float bag holes as per dwg
 2-C'sink float bag holes as per dwg
 3- Prepare tube for welding
 4-Bond web in place as per Dwg D3391 & QSI 015.
 Adhere for 12 hours)

A/R Sikaflex/exp: 128626
 batch#: 14/10/09

NOTE: ENSURE WEB IS INSERTED IN AFT END OF TUBE

DC 14/04/09

150

QC5- Inspect part completeness to step on W/O 0.00

150

QC

Quality Control

Memo

0.00

2 7 0 14/04/03DAS
18
9:00

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N900040100

Setup Start

NS1

Revision ID:

Item Name: Mid Tube Assembly

Stop

NS2

Start Date: 3/31/14 Start Qty: 2.00

2

Cust Item ID:

Required Date: 4/14/14 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

160

Skidtubes

Skidtubes

0.00

2

4

0

BE 14-04-03

Memo
1-Weld crossbolt spacer as per dwg D3391 & QSI004
2-grind weld flush - 04/14/03

170

170

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds

0.00

DAS

27

9.89

14/4/13

2

180

180

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

DAS

27

9.89

14/4/13

2

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2

Cust Item ID:

Required Date: 4/14/14 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
185 *185* HandFinish	Pressure Wash per QSI005 4.3 M 128027.	0.00						2	761443
	Memo	0.00							
Hand Finishing	AND REALODINE AS PER PAR09-043								
190 *190* Powdercoat	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M 128027.	0.00						2	φ 14-4-4 () DAS 34 9.89
Powder Coating	Memo	0.00							
	START TIME: 8:20	30°							
	OVEN TEMPERATURE: 300°								
	FINISH TIME: 8:30								
200 *200* QC	QC3- Inspect Part Finish M 128027.	0.00						2x	14/04/04
Quality Control	Memo	0.00							

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2

Cust Item ID:

Required Date: 4/14/14 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
						Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
230 *230* HandFinish	HandFinishing Hand Finishing	0.00							
	Memo	0.00							
	1- press fit D3591-1 spacers using DT9416 starting from 0.500" side								
	2-Install Inserts as per Dwg								
240 *240* QC	QC5- Inspect part completeness to step on W/O	0.00							
Quality Control	Memo	0.00							
250 *250* Packaging	Identify as per dwg & Stock Location:	0.00							
Packaging	Memo	0.00							

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Stop

NS2

Start Date: 3/31/14 Start Qty: 2.00

2

Cust Item ID:

Required Date: 4/14/14 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

260

QC21- Final Inspection - Work Order Release

0.00

260

QC

Quality Control

0.00

*10/14-04-9**MF
4-1-14*

Picklist Print

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Work Order ID: 115419

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D3391-023

Parent Item: D3391-023

Parent Item Name: Mid Tube Assembly

Start Date: 3/31/14

Required Date: 4/14/14

Start Qty: 2.00

Required Qty: 2.00

Comments:

IPP A05.10.20New Issue KJ/EC
 IPP B06.02.10ECN773 dwg rev.D EC
 IPP C 07.03.20 rev F dwg EC
 IPP D 07.03.28 re-format EC
 IPP E 07.10.31 ecn 1053P EC
 IPP Rev:F ECN 1056 07-11-13 DD verified by: EC
 IPP Rev:G 08-09-08 new process (ecn 08-510) DD verified by:EC
 IPP Rev:H 08-09-10 revH as per dwg DD verified by:EC
 IPP Rev: I 08-11-13 Removed steps per w/o, QC KJ verified by: ec IPP
 Rev:J add in seq 140 expire date &# sikaflex DD 10.02.17 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2500-1-100		Manufactured	No			100	Each	85.0000	1	2	**	DC 14/03/31
-------------	--	--------------	----	--	--	-----	------	---------	---	---	----	-------------

D2500-1-100

Skidtube Extrusion

Location	Loc Qty	Loc Code
HALL	85	
	24	
	61	
82373		
86065		

D3389-1		Manufactured	No			140	Each	8.0000	1	2	**	DC 14/04/62
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D3389-1

Web

Location	Loc Qty	Loc Code
LG	8	
	8	
113057		

D3681-1		Manufactured	No			160	Each	239.0000	5	10	**	BE 14/04/03
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D3681-1

Spacer

Location	Loc Qty	Loc Code
LG	168	
114884	168	
LG001	71	
409109	71	

Picklist Print

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D3391-023

Parent Item: D3391-023

Parent Item Name: Mid Tube Assembly

D3391-1

D3391-1

Bushing

Manufactured No Each

Start Date: 3/31/14

Start Qty: 2.00

Required Date: 4/14/14

Required Qty: 2.00

**

ALS4-1032-130

AELS4-1032-130

Purchased No

230 Each

10,025.00

20

40

**

HL 1st load

A1 S4-1032-130

Rivnut

Location	Loc Qty
FG	10
92873	10
FP001	80
100699	5
107918	38
109107	37

Loc Code

Location	Loc Qty
FP001	9964
M128649	9964
ST279	4
M128211	4
st510	57
M126109	57

Loc Code
X40

2 X D4095.045

24 X AN324A

24 X NAS1149C0332R

B 112308

B M128649

B M127410

DQA:

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: _____

Work Order update only

Work Order: _____	DISPOSITION	
Part No. _____	Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>
NCR No. _____	Scrap <input type="checkbox"/>	Crosstube <input type="checkbox"/>
	Use-as-is <input type="checkbox"/>	Machining <input type="checkbox"/>
	Suspected Unapproved <input type="checkbox"/>	Thermoforming <input type="checkbox"/>
		Large Fab <input type="checkbox"/>
		Finishing <input type="checkbox"/>
		Composite <input type="checkbox"/>

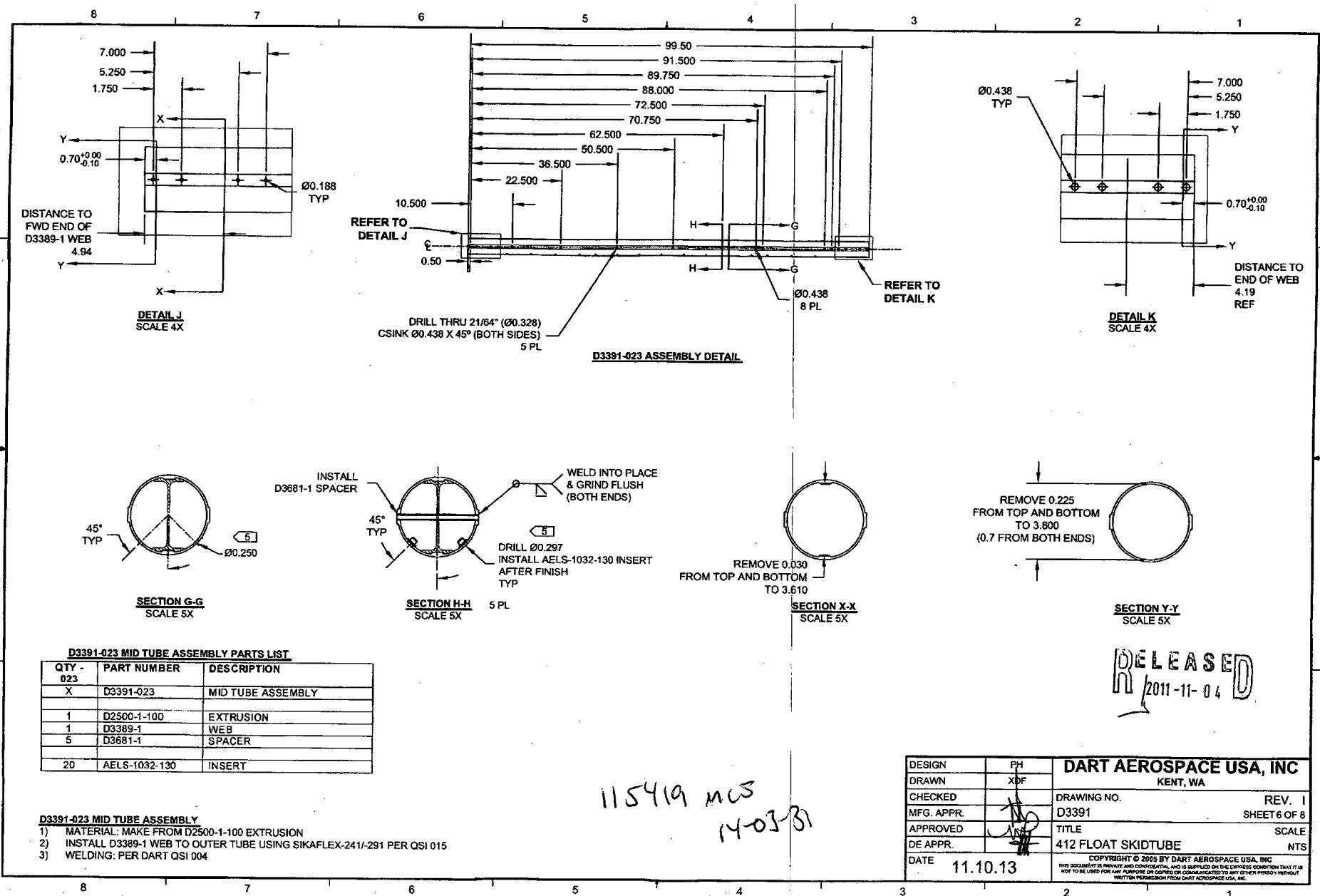
AGAINST DEPARTMENT/PROCESS

Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>
Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>
Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>
Supplier <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function		<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence		<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	



6
NO. 334

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliot
Job #: 108635
Part #: A3391-023
Description: Skullcap
Welding Process: Tig[1] Mig[]
Base material: Alum
Current: AC[✓] DC[]

TEST REQUIREMENTS AND RESULTS

Visual:	pass[<u>✓</u>]	fail[<u> </u>]
Incomplete Penetration:	pass[<u>✓</u>]	fail[<u> </u>]
Incomplete Fusion:	pass[<u>✓</u>]	fail[<u> </u>]
Cracks:	pass[<u>✓</u>]	fail[<u> </u>]
Overlap (cold lap)	pass[<u>✓</u>]	fail[<u> </u>]
Undercut:	pass[<u>✓</u>]	fail[<u> </u>]
Pin holes:	pass[<u>✓</u>]	fail[<u> </u>]
Porosity (surface):	pass[<u>✓</u>]	fail[<u> </u>]
Coloration:	pass[<u>✓</u>]	fail[<u> </u>]
Burn through:	pass[<u>✓</u>]	fail[<u> </u>]

Qualifier Barclay Elliot Date of Test Coupon 13-10-25

Welder Barclay Elliot Date of Test Coupon 13-10-25

The above named individual is qualified in accordance with AWS D17.1.2001 to weld